

URBANIZATION PHENOMENON IN KANO STATE METROPOLITAN: PROBLEMS AND SOLUTIONS FOR SUSTAINABLE URBAN GROWTH

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Abstract

Kano State Metropolitan in the northern region of Nigeria faces rapid and mostly spontaneous urbanization, which has become one of the greatest developmental issues there. In this paper, the authors will be looking at the urbanization phenomenon in Kano along four key dimensions namely population growth, level of urbanization, economic development and changes in land use. The research will be performed with a qualitative-descriptive methodology, and it will be based on a secondary analysis of data and review of literature that will enable the study of the specifics of the urban growth in the region. According to the findings, population growth which has been caused by high rural-urban migration, as well as natural growth, has exerted huge pressure on the housing and the infrastructure that provides government services. Although the extent of urbanization has been on the increase, it did not come along with sufficient infrastructure and planned control. On the economic front, Kano continues to host one of the main regional hubs, but its economic development is curtailed by informal economic framework, juvenile unemployment. Besides, irregular conversion of land use is one of the reasons that have led to environmental degradation, loss of agricultural land, as well as the prevalence of urban sprawl. In order to manage these obstacles, a Smart Growth approach will be proposed in the study, the portion of the study will take place in the urban core, which requires changes in slum upgrading, transportations, and the empowerment of the local business, and the suburbs will be approached with long-lasting management through urban growth boundaries and affordable housing development. These findings are important because they inform in-depth urban planning frameworks that can be used to become inclusive, resilient and sustainable urban development in Kano State Metropolitan.

Keywords: Population development, the degree of urbanization, economic evolution, land use modifications, smart growth, Kano Metropolitan

INTRODUCTION

Kano State Metropolitan, located in the northern region of Nigeria, stands as one of the country's most historically significant and rapidly urbanizing areas. As the commercial and cultural hub of northern Nigeria, Kano has evolved from a traditional trading center into a sprawling metropolitan region, reflecting both the opportunities and challenges of urbanization in sub-Saharan Africa. With a population exceeding four million, the city has experienced accelerated growth driven by rural-to-urban migration, natural population

increase, and its strategic position as a gateway for regional trade with neighboring countries such as Niger and Chad.

This urban expansion, however, has occurred largely without adequate planning or infrastructure development, resulting in a range of pressing urban challenges. These include housing deficits, traffic congestion, environmental degradation, inadequate service delivery, and widespread informal settlements. Moreover, the growing mismatch between population growth and economic opportunities has contributed to high levels of unemployment, especially among youth, and a rise in socio-economic vulnerabilities.

Studying the Kano State Metropolitan area is essential for understanding the broader dynamics of urban growth in emerging African cities. It serves as a representative case for cities undergoing rapid transformation without the necessary governance frameworks and spatial planning mechanisms. As such, this research explores key dimensions of urbanization in Kano population trends, urban expansion, economic restructuring, and land use change while proposing sustainable strategies to support inclusive and resilient urban development in the region.

Urbanization has been defined as one of the most influential demographic and economic socio changes of the 21 st century in developing countries in the sub-Saharan African region. Nigeria, the most populous country in Africa, is an example of this trend believing that her urban areas are growing at an unprecedented pace that in most times exceeded the rate at which infrastructure is being developed and governance capacity (Adebayo & Oni, 2020). Kano State Metropolitan area in the northern part of Nigeria is a vital case study used in determining the complexity of contemporary urbanization in the African countries since ancient economic activities meet urban modernity needs.

With impressive population growth in the last few decades, the Kano State metropolitan area has gone through an evolution process of changing a modest commercial hub to become an extended urban sprawl passing through several developmental challenges. This fast-growing city with elements of controlled and uncontrolled settlement patterns has resulted in a multilateral urban environment, through which the results of economic growth, high levels of inexplicable infrastructure and environmental challenges are all present (Muhammed et al., 2019). Urbanization in Kano is a phenomenon that is numerous in terms of dimensions comprising of, among others, demographic changes, restructuring of the economy, spatial growth and environmental changes.

The dynamics of urbanization in the Kano State Metropolitan is very important in a number of ways. To begin with, it is a test case of other similarly large but poorly planned cities in Africa, which are growing so fast without proper planning structures. Second, the sustainable development of the region would be of utmost importance to the stability of the economy of the regions due to the region serving as a commercial gateway between Nigeria and the rest of the countries. Third, Kano urbanization experience could provide input in example-based implementation of similar policy intervention and planning strategies in other emerging urban centers in the continent.

This research would elaborate its analysis covering urbanization phenomenon in Kano State Metropolitan through four important dimensions of population growth pattern, urbanization levels, economic development trend and land use pattern. With the help of this complex analysis, the study tries to detect the main problems linked to a fast urbanization process and offers eco-friendly solutions, which could be used in future planning of this process in the area.

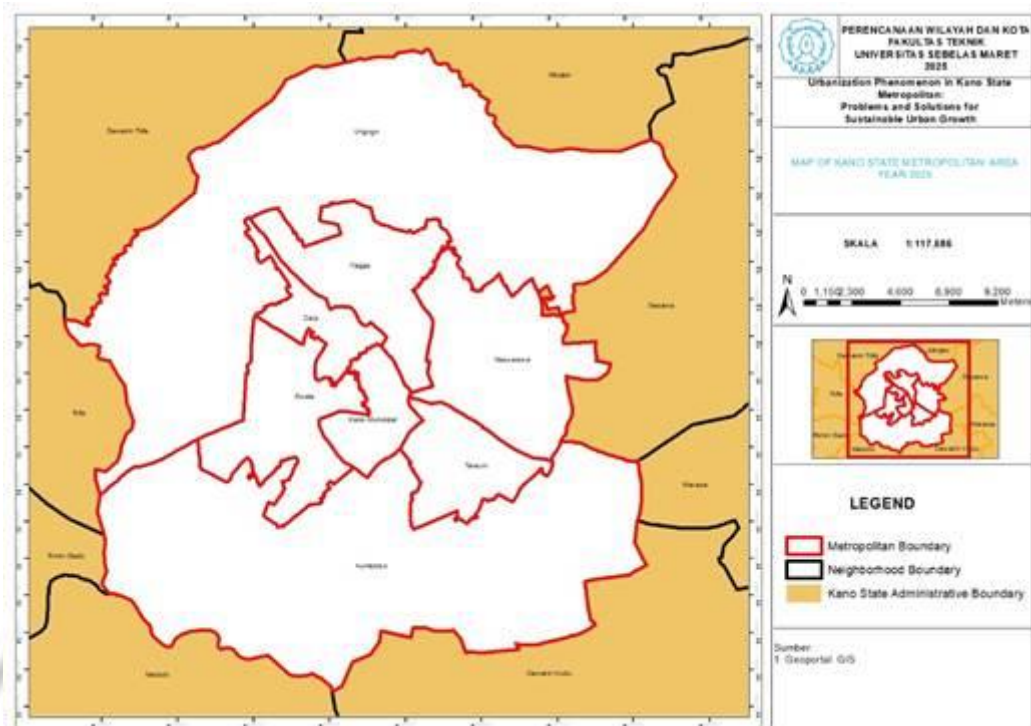


Figure 1.1 Map of Kano State Metropolitan Area

(Source: Research, 2025)

METHODOLOGY

The process under investigation by this research is associated with urbanization in Kano State Metropolitan and, thus, the adopted study technique is a case study. The case study research technique strives to explain and examine particular Urbanization Phenomenon in a certain real-life context. Ilhami, M. W. (2024) argues that case studies can be crucial in order to uncover the way events are perceived and understood. The case study method in the present study enables the researcher to carry out an extensive investigation on information related to how urbanization is affecting urban growth patterns in Kano State Metropolitan Area due to the rapid and unplanned manner in which it is happening.

The approach is very appropriate towards the realization of the complexity and dynamics emerging in the field, such as the impact of urban growth in the use of land, activities, infrastructure, and livelihoods. The methodology that has been employed in data collection consists of:

Secondary Data Collection

The sources of secondary data were mixed since in addition to government publications and academic sources, institutional reports and data available on the internet were also used. These sources are helpful in the individual understanding of the state and tendencies of the urbanization theme in Kano State Metropolitan, maps, statistics, and indicators of the level of development.

A review study on literature was organized to enable the recollection of available knowledge and data about the process of urbanization in Kano State. This takes into consideration the examination of scholarly articles, policy reports and past case reports on urban development, land use dynamics, economic issues, and population dynamics in northern Nigeria.

Population Growth in Kano State Metropolitan

Over the last few decades, Kano State Metropolitan has been experiencing high fertility rates coupled with the ever-increasing rural-to-urban migration of people in adjacent northern states. By 2023, it is estimated to be more than 4 million people, making Kano one of the most populous urban complexes in Nigeria (NPC, 2023). The development has not exactly been like in other cities of the world where urban expansion had been planned to an extent, whereby, the population of the city of Kano has been developed mostly spontaneously and uncontrolled. The expansion has especially been very vigorous in regions where land prices and its accessibility are low like the suburban and peri-urban locations like Ungogo, Kumbotso and Minjibir where informal settlements are covering faster than formal planning systems.

High population densities are still witnessed in the city center and LGAs such as Kano Municipal, Tarauni, Dala which are characterized by limited space and non-availability of affordable houses in the planned areas. These high-population areas are currently experiencing growing pressure in their land, transport, educational and health facilities. Pollution caused by informal concentration of people within these central regions is also very high (Yahaya et al. 2020). It is at least 9,000 individuals per square kilometer.

This high population growth caused by both natural growth and economic migration-presents a great challenge to urban areas. Crowded residential places, housing crisis, road jams and strained city amenities are becoming hard to handle by the locals. Kano being the economic and cultural center of northern Nigeria, still draws individuals in search of work and better livelihoods, however, failure of the city to plan exhaustively and having the right infrastructure plans puts the city under serious threat of posing worse urban vulnerabilities.

Table 1. Population and Growth Rate in Kano State Metropolitan Area

LGA	1991	2006	PGR (%) 1991–2006	2022	PGR (%) 2006–2022
Dala	280,000	418,759	2.61	688,700	3.11
Fagge	130,000	200,095	2.79	329,100	3.08
Gwale	230,000	357,827	2.88	588,500	3.12
Kano Municipal	240,000	371,243	2.83	610,600	3.07
Kumbotso	190,000	294,391	2.86	484,200	3.12
Nassarawa	390,000	596,411	2.92	980,900	3.21
Tarauni	145,000	221,844	2.93	364,900	3.20
Ungogo	240,000	365,737	2.86	601,500	3.18
Total Metro	1,755,000	2,825,307	2.84	4,648,400	3.14

Source: National Population Commission (1991, 2006), Estimates (2022), field-based estimation

Table 2. Area and Density of Kano State Metropolitan LGAs

LGA	Area (km ²)	1991 Density	2006 Density	2022 Density
Dala	13.90	20,144	30,130	49,542

Fagge	35.27	3,687	5,672	9,332
Gwale	36.09	6,373	9,918	16,304
Kano Municipal	14.90	16,107	24,935	40,964
Kumbotso	186.70	1,018	1,577	2,593
Nassarawa	48.72	8,007	12,245	20,143
Tarauni	23.16	6,261	9,580	15,755
Ungogo	214.50	1,119	1,705	2,803
Total Metro	573.24	3,063	4,928	8,111

Source: Estimated from NPC Census (1991, 2006), GIS-based projections (2022), LGA area from Kano State Government GIS Unit.

Level of Urbanization in Kano State Metropolitan

Demographic and spatial transformation in the Kano State Metropolitan Area is greatly indicated by the extent of Urbanization in the state. Urbanization is the process usually quantified based on the percentage of people living in urban setup as opposed to rural ways of life. Kano Metropolitan illustrates the greatest rate of urbanization in northern Nigeria as it is the largest urban center in the area. There are eight Local Government Areas (LGAs) namely; Kano Municipal, Dala, Fagge, Tarauni, Gwale, Nassarawa, Ungogo and Kumbotso constituting the centre of the urban Kano.

These LGAs have steadily experienced an increment in their total population and degree of urban concentrations as shown by the National Population Commission. In 1991 the metropolitan population of Kano was about 1.75 million. In 2006, this amount had increased to 2.82 million and is projected to hit 4.65 million in 2022. In 2006, Kano Municipal attracted a population density of more than 25,000 inhabitants per square kilometer that has increased to almost 41,000 by the year 2022 (NPC, 2006; NPC, 2023). This bears testament not only to a high rate of population growth but also to a severe concentration in the urban centre of the metropolitan region.

The adjacent LGAs, especially Ungogo, Kumbotso, and Nassarawa have happened to gain massive urban growth due to the spillover effects of the core urban LGAs. All these peripheral regions are soaking up the population spillover and the informal settlements which can no longer be absorbed by the central city. This trend was similar to the advancing suburbanization and flat expansion of the urban area, as housing estates, industrial lands, and commercial buildings spread into peri-urban boundaries without proper planning (Yahaya et al., 2020).

The aspect of strategic location also leads to a high urbanization rate in Kano since it is regarded as an economic and cultural center. Operation of regional markets (Kurmi, Sabon Gari) and the location of the city in north-western Nigeria, textile and agricultural industry, the education industry of the country all have led to the attraction of the masses of labor forces as well as stimulated the extension of the city. Nevertheless, the related problems are rather complex as uncontrolled transformation of arable lands into housing and industrial constructions, environment pollution, waste management, and infrastructure under-development are only a few of them.

Kano has become more regionalised and informal in its urbanisation, there is a necessity to have metropolitan-wide planning. There should be a holistic urban structure that should

provide a blueprint about future development, address the effects to the environment and push the city to become more friendly to urban lives of the increasing population in the city.

Table 3. Urbanization Level in Kano State Metropolitan Area (1991, 2000, 2010, 2020)

LGA	1991 Urban Pop.	Share (%)	2000 Urban Pop.	Share (%)	2010 Urban Pop.	Share (%)	2020 Urban Pop.	Share (%)
Dala	280,000	15.96	350,000	15.36	450,000	14.52	620,000	14.22
Fagge	130,000	7.41	165,000	7.24	210,000	6.78	305,000	7.00
Gwale	230,000	13.11	290,000	12.74	375,000	12.11	510,000	11.70
Kano Municipal	240,000	13.68	300,000	13.17	385,000	12.43	545,000	12.49
Kumbotso	190,000	10.83	240,000	10.54	320,000	10.33	430,000	9.87
Nassarawa	390,000	22.22	470,000	20.63	600,000	19.37	840,000	19.25
Tarauni	145,000	8.26	180,000	7.90	240,000	7.75	340,000	7.79
Ungogo	240,000	13.68	295,000	12.95	390,000	12.59	540,000	12.39
Kano Metropolita n Area	1,755,000	100.0 0	2,290,00 0	100.0 0	3,270,00 0	100.00	4,130,00 0	100.0 0

Source: National Population Commission (1991), Estimates (2000, 2010, 2020), GIS-based projections

Economic Development in Kano State Metropolitan Area

Kano State Metropolitan Area is the economic nerve centre of northern Nigeria and has a long historical place in northern Nigeria commerce, trade and industry. It has an economy mainly dominated by wholesale and retail trade, manufacturing, informal market, small-scale agro-processing as well as services. Some of the biggest traditional markets in the metropolitan area include Kurmi Market, Sabon Gari Market and Kantin Kwari Textile Market, which between them have a considerable impact on both local economy and job creation.

Even though Kano boasts of a robust business foundation, its growth in the economic sphere has been plagued with structural inhibitors, especially since the beginning of the 2000s. The shrinkage of the textile industry and lessening of modernization in industries as well as the electricity crisis have stalled the expansion of the formal sector. The big part of economic life in the city gravitated towards informal trade and micro-enterprises that employed more than 70 percent of the population in the metropolis area (Bello et al., 2018; Akinyemi & Uche, 2021). This increasing casualness constrains tax revenues and cripples' capacity of the local government to invest in infrastructure and services.

Kano, however, continues to play a critical role as an economic center in the northern part of Nigeria because of its central location as the trade gateway of the region that links Nigeria to Niger, Chad, and other West Africa markets. It has a well-established road and rail infrastructure, historical trade corridors and an active cultural economy and as such is a strategic transit point along cross-border trade and economic integration. Government

initiatives such as the creation of economic clusters and revival of industrial estates like the Bompai, Sharada industrial estates to diversify the economy and generate formal employment have been initiated in the recent past.

The economic growth of Kano is directly linked with the general life of the metropolitan population especially in the textile trading, leather work, food distribution and transportation services. Nevertheless, the turbulence in the market performance, lack of access to finances, and poor infrastructure continue to be barriers to long-run economic growth.

Strategic planning is required in order to sustain and reinforce Kano as a local economic hub. These will involve bringing the informal sector into the mainstream, making investments in infrastructure, boosting the micro small and medium enterprises (MSMEs) and economic planning synergized with urban development plans. When managed appropriately, Kano Metropolitan will be able to spearhead the process of inclusive and sustainable economic growth in the north of Nigeria.

Gross Domestic Product (GDP) of Kano State and Kano Metropolitan Area (1991–2020)

Table 4. GDP at 1991, 2000, 2010, and 2020 Constant Market Prices (Billion Naira)

Region	1991	2000	2010	2020
Kano State (Total)	52.4	132.7	312.4	765.9
Kano Metropolitan Area	28.7	75.4	202.8	459.6

Source: National Bureau of Statistics (NBS), Kano State Ministry of Budget and Planning

Table 5. Growth Rate of GDP at Constant Market Prices (%)

Region	1991–2000	2000–2010	2010–2020
Kano State (Total)	30.6	25.1	15.4
Kano Metropolitan Area	31.0	26.9	11.8

Source: National Bureau of Statistics (NBS), Kano State Ministry of Budget and Planning

Land Use in Kano State Metropolitan Area

One of the key changes that have taken place in the metropolitan area of the Kano State in recent decades is related to the fact that urbanization has led to significant changes in the land use patterns. The rapid growth of developed land in the metropolitan LGAs including Kano Municipal, Dala, Nassarawa, Tarauni and Ungogo LGAs, has led to extensive conversion of agricultural lands, open areas and rural districts to high density residential, commerce and infrastructural developments.

The available satellite and spatial evidence shows that the amount of land devoted to residential estates, informal settlements, markets, road infrastructures, and industrial clusters has also grown tremendously between 2000 and 2020 especially within the peri-urban corridors, with Kumbotso and Ungogo among the most notable (Yahaya et al., 2020). This is very rapid urbanization which closely has connections with extreme population growth, in-migration of people in rural areas and the continued attraction of Kano as an economic center of several regions.

With growing urban edges, the agricultural area, such as the irrigated farming lands, grazing reserves and wetlands, has been getting encroached upon. Environmental sustainability

should be taken seriously based on the loss of green areas, such as a deteriorating soil quality, loss of species, some biodiversity, and the increase of the urban floods, owing to clogged natural drainage systems.

The urban sprawl has also been augmented by the uncontrolled land and zoning amendments, which have increased the expansion of land use especially where there is no critical zoning enforcement and spatial planning. The absence of an informal land market in bulk of the development in peripheries contributes towards the random and inefficient urban structure that cannot be easily connected with the infrastructure and amenities.

The fact that Kano is a central city in its regional setup implies that the change in land use in the metropolitan area will have an implication outside the metropolitan city. The ongoing process of rural-urban land conversions has impacts on regional food systems, the peri-urban labor markets, and resilience in the environment.

These trends necessitate the immediate requirement of integrated land use planning in order to contain them. This should encompass enforcement of urban growth boundary, protecting important ecological areas and introduction of land use strategies that strike a balance between necessity to develop various areas and sustainability of the environment. When appropriately executed, the measures may assist in making the urban development of Kano inclusive and long-lasting.

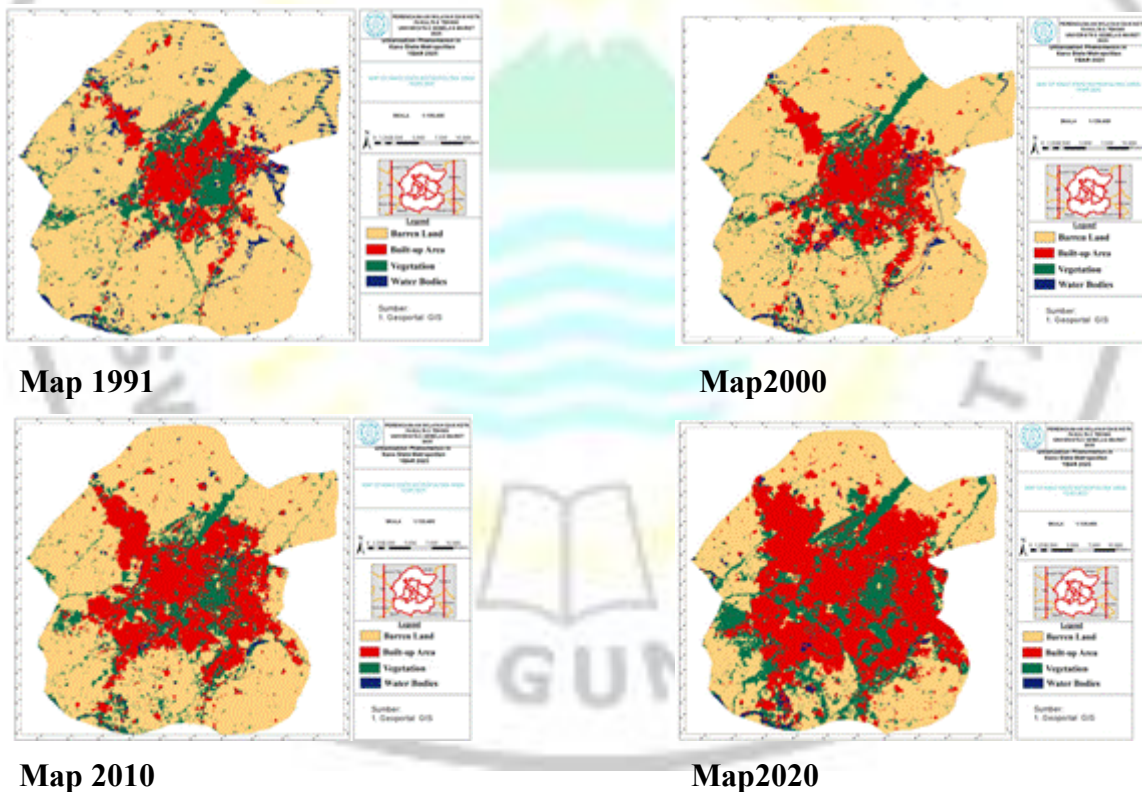
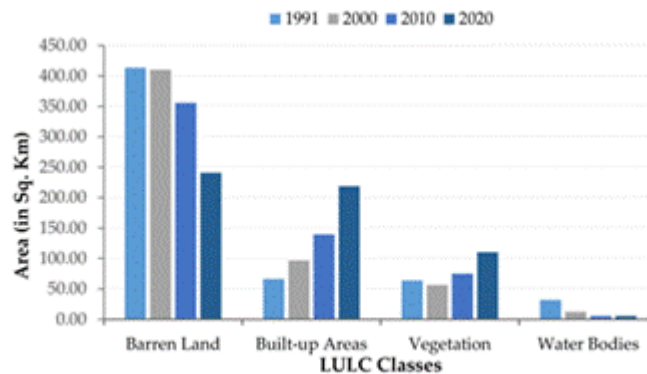


Figure. LULC Map for the years (a)1991, (b)2000, (c)2010, and(d)2020.

(Source:Research ,2025)

LULC Classes	1991 Area		2000 Area		2010 Area		2020 Area	
	Sq.km	Percent	Sq.km	Percent	Sq.km	Percent	Sq.km	Percent
Barren Land	413.47	71.88	410.26	71.32	355.78	61.85	240.89	41.88
Built-up Areas	66.16	11.50	96.51	16.78	139.26	24.21	218.71	38.02
Vegetation	63.68	11.07	56.23	9.77	74.78	13.00	110.25	19.17
Water Bodies	31.93	5.55	12.24	2.13	5.42	0.94	5.38	0.93
Total	575.24	100.00	575.24	100.00	575.24	100.00	575.24	100.00



(Source: Research, 2025)

RESULTS AND DISCUSSIONS

After discussing the key aspects of the urbanization process in Kano State Metropolitan Area, we now turn to an analysis of the problems and challenges that accompany this rapid development. This analysis is essential to identifying critical areas that require strategic intervention to achieve sustainable and equitable urban growth. The following are several key problems and challenges currently affecting the development trajectory of Kano State Metropolitan

Table 6 Problem Identification Table

Issue/Challenge	Description	Areas Affected	Reference
Infrastructure	City faces significant infrastructure decay with existing infrastructure being overstretched due to population explosion. Government needs to address over-stretching while protecting existing infrastructure from vandalization.	Entire metropolitan area, particularly urban core areas with high population density	(Koko <i>et al.</i> , 2021)

Housing Crisis	Kano metropolitan region has a 60% housing shortfall, significantly contributing to inadequate solid waste management and urban planning challenges.	Metropolitan-wide, affecting both urban and peri-urban areas	(Dankani, I.M. and Abubakar, 2011)(Sani, 2006)(Yasin <i>et al.</i> , 2021)
Waste Management Problems	Management system covers only 30% of daily solid waste generated. 56.4% of waste ends up in inappropriate disposal locations (32.1% in open pits, 24.3% on roadsides). 79.25% of residents don't use official dump sites.	City-wide, particularly affecting residential areas, markets, and commercial districts	(Aliyu and Amadu, 2017; Ummah, 2019)(Nabegu, 2010)
Rapid Population Growth	Metro area population reached 4,491,000 in 2024 (3.29% increase from 2023), creating overcrowding, slum proliferation, rising pollution, overuse of facilities, and urban poverty.	Entire metropolitan area, with concentrated effects in central business districts and residential zones	(Faisal Koko, Bello and Abubakar Sadiq, 2024)
Transportation and Traffic Issues	Problems of urban mobility and traffic congestion as infrastructure struggles to cope with growing population and economic activities.	Major roads, commercial areas, business districts, and transportation corridors	(Otuoze, Hunt and Jefferson, 2021)
Environmental Pollution	Environmental pollution is identified as a major challenge, exacerbated by inadequate waste management and industrial activities.	Industrial zones, residential areas, water bodies, and commercial districts	(Nabegu, 2010)
Unemployment and Economic Challenges	High unemployment rates despite Kano being Nigeria's second-largest industrial and commercial center after Lagos.	Metropolitan-wide, particularly affecting youth populations and informal settlements	(Otuoze, Hunt and Jefferson, 2021)

Urban Planning and Governance Issues	Poor conservation efficacy, inadequate policies and legislation for heritage and protected areas, shortage of funding for urban development.	Historic city center, heritage sites, protected areas, and planned development zones	(Dankani, I.M. and Abubakar, 2011)
Security Concerns	Increased crime rates identified as a major challenge facing the metropolitan area.	Urban areas, particularly commercial districts, residential areas, and transportation hubs	(Dankani, I.M. and Abubakar, 2011)

(Source: Research, 2025)

1. Inadequate Infrastructure

Kano has experienced fast urbanization which has not been sustained by the establishment of proper infrastructure. The bare necessities of life in the forms of clean water, electricity, sewage and road networks are either non-existent or extremely overloaded. Lack of connection to the formal infrastructure systems means that many urban areas particularly those within the peri-urban areas lack adequate access to services and this has led to a poor quality of life. Inadequate infrastructure promotes inefficiency of delivered services, congestion, and risks to the environment.

2. Housing Crisis and Informal settlements

Much migration and population growth creates a housing deficit in Kano. Insufficient cheaper living facilities have led to the rising and proliferation of informal living and slums. These regions are characterized by congestion, lack of sanitation, low building codes and much susceptible to threats and natural calamities. The situation has been further complicated due to the lack of appropriate policies and implementation of policies in the urban housing sector that has resulted in lack of inclusive development problems in the long term.

3. Problems of Solid Waste Management

The Kano metropolitan area continues to suffer poor urban solid waste management. The extent of waste collection coverage is small and most of the residents engage in setting waste anywhere or dumping materials in drains, streets, and open grounds. The current waste management methods are not effective and little or no recycling occurs. Poor management of waste finally complicates the pollution of the environment, water contamination, epidemic transmission and seasonal floods because of congested drainage systems.

4. High Population Rate

The urban region has been showing an exponential trend of populations fueled by rural to urban migration and high fertility. The rate of this growth has availed extreme pressure on service delivery owing to urban land, housing facilities, education, and health infrastructures. The trend in demographic changes has not been accompanied by the planning to facilitate the changes to ensure an optimal usage of a limited resource to curb

urban poverty. Unless controlled, there are chances that the burgeoning population can put further pressure on the carrying capacity of the city and jeopardize sustainable development.

5. Transport and Traffic Jams

Kano is beset with an unsystematic and congested transportation system. There is a lack of an established mass transport as well as a bad road network and the infiltration in the transport system of informal transport systems (tricycles and minibuses) which aggravated horrifying traffic congestion, inefficient travelling distances and hazardous roads. Inadequate pedestrian infrastructure as well as poor traffic management systems also contribute to the risk of getting involved in an accident and constraining mobility particularly to the urban poor.

6. Environmental Pollution And Degradation

The urban activities in Kano have contributed to the rising challenges on the environment. Water, air and land pollution is caused by industrial emissions, car exhausts, indiscriminate dumping of trash, and uncontrolled construction. The lack of green space, changing wetlands to urban land has increased the severity of heat and lowered resilience to the environment. There is a direct impact of the pollution on the health of people such as respiratory diseases and water borne diseases.

7. Economic Problems and Unemployment

Although the city is an important center of commerce in northern Nigeria, Kano still remains one of the cities with high unemployment levels especially among the young people. The informal economy prevails, and there is little access to secure income, employment and social security. Lack of entrepreneurial support, low quality industrial infrastructure and the lack of access to credit have inhibited inclusive economic growth. This consequently leads to economic strains that tend to be the cause of crime, social conflicts and rural urban migration.

8. Poor town planning and administration

Planning and related issues in the Kano Metropolitan Area are faced by institutional deficiency, insufficient organizational coordination, and poor actions in implementation of planning rules. Development is usually too rapid to be planned; hence, land-use conflicts, public domain encroachment, inadequate infrastructure integration are very common. In addition, it has a weak civic involvement in the decision-making process that contributes to lack of accountability and responsiveness of urban policies.

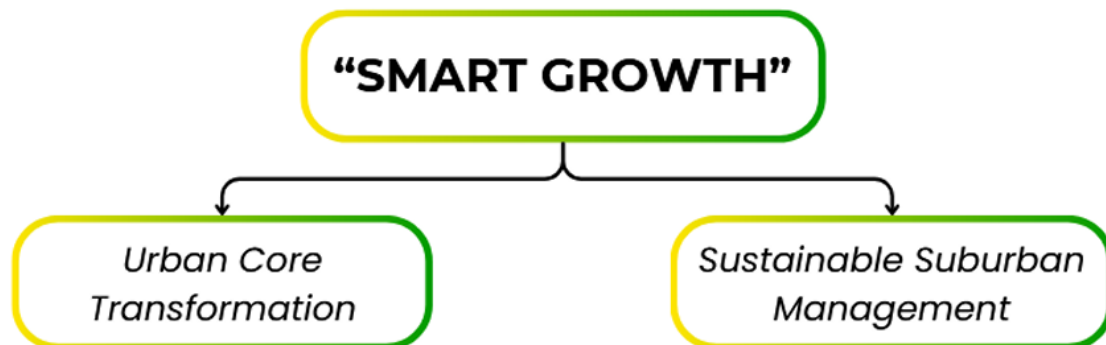
9. Urban Safety and Security worries

Kano has been gradually facing urban security challenges such as petty thefts, gang wars and to a certain extent insurgency threats in the neighboring states. Unemployment, spread of informal settlements and poor policing have rendered some urban locations more prone to insecurity. There is also the lack of street lights, bad city planning, and social inequality which make them feel unsafe especially women and young adults in street environments.

Solution

To solve the several problems above, we propose the concept of “Smart Growth”. The concept of "Smart Growth" integrates innovative approaches to transform urban cores and manage suburban expansion sustainably. It focuses on enhancing the city center through urban core transformation while promoting sustainable suburban management. This dual

solution aims to achieve balanced, inclusive, and sustainable urban development, ensuring long-term benefits for both the city and its surrounding areas.



The "Smart Growth" concept consists of two key solutions (Urban Core Transformation & Sustainable Suburban Management), each supported by specific strategies, the strategies work together to achieve comprehensive urban development. These are the elaboration of the strategies.

Urban Core Transformation

It is very important to transform the urban landscape in order to enhance the living standards in the core local government areas of Kano, which include Dala, Fagge, Gwale, Kano Municipal, and Tarauni due to their dense populations, deteriorating infrastructure, and social-economic weaknesses. These are vital zones to rationalize (again) the form of the city, cheap nike shoes regenerate economic activity (including business), and enhance the environmental and social conditions.

a. City Wide Slum Improvement Schemes

Kano has overcrowding, inadequate housing, and the absence of services within the inner-city neighborhoods. A comprehensive slum upgrading plan must incorporate the physical developments (roads, drainage, power), enhance the living standards of the houses, clean water, medical facilities and education facilities. Inclusive sustainable outcomes can be successfully achieved through community involvement and livelihood support and legal land tenure (Martini, 2021).

b. Making the Micro, Small, and Medium Enterprises (MSMEs) empowered

Kano has a strong economic base through the establishment of MSMEs, particularly, in the informal trade and textiles industries. Nevertheless, they cannot do it by the handicap of inadequate access to credit, low skills, and not being formally registered. Business incubation, entrepreneurship training and financial services to be aided by Government and NGOs. Such intervention will enhance better income generation, discourage unemployment and formalise some segments of the big informal economy in Kano.

c. Enhancing Public Transportation System

Traffic congestion is getting out of control and the informal transportation sector has taken over, as such, Kano needs to increase and improve its public transport system. There is a need to invest in bus rapid transit (BRT), intermodal connectivity and non-motorized transport infrastructure (e.g. sidewalks, bike lanes). It has the potential to decrease reliance

on personal cars, minimize pollutants and enhance city movement and, particularly, mobility of the low-income citizens.

d. Strengthening the Management and Recycling of Waste

Kano has a very small percentage of well-collected and disposed of solid waste. Automation of waste processing systems through the use of the technology; Refuse Derived Fuel (RDF) and increase in recycling programs can enhance environmental health. These should be supplemented with community-based waste collection, campaigns in the society with regard to waste management, and green space protection.

Sustainable Suburban Management

The questionable land use change and uncontrolled growth of the peripheral LGAs of Ungogo, Kumbotso, and Nassarawa with their attendant agricultural land threats and environmental sustainability risk is being observed. Sustainable suburban management aims to restrain the sprawl of urban development but facilitate the all-inclusive development.

a. Urban Growth Boundaries (UGBs) enforcement

Outward growth could be curbed with proper Urban Growth Boundaries (UGBs) that will safeguard peri-urban farms and ecological areas. The zoning laws should be tightened up by constant surveillance and severe punishment of any construction of buildings going beyond the marked areas. It makes infrastructure and services focused on planned urban areas, making it more efficient, leading to a decreased sprawl.

b. The Advancement of Affordable Housing in the Central City

To avert the situation where the population at low income will be driven to the fringe of the urban areas, schemes of housing the low-income people ought to be generated in the urban core areas. The availability of high-density units with access to employment and services at affordable prices can be provided with the help of the public-private partnership. This plan makes social inequality go down, and inhibits the growth of informal settlements and supports compact, transit-oriented development similar to best practices adopted in cities like Vienna.

CONCLUSION

As the major metropolitan center and economic hub of northern Nigeria, Kano State Metropolitan plays a critical role in regional development but faces pressing challenges such as rapid population growth, housing deficits, informal settlements, environmental degradation, and urban sprawl. The unregulated expansion of the city has placed significant pressure on infrastructure and weakened coordinated urban planning. To overcome these issues, the concept of "Smart Growth" offers a forward-looking solution by combining urban core transformation with sustainable suburban management. This dual strategy seeks to rejuvenate the city center while guiding suburban growth through planned and inclusive development. By adopting these approaches, Kano can foster a more balanced, resilient, and sustainable urban future that benefits both the central city and its expanding peripheries.

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